Saddlebrook Mortgage Banking Survey

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I INTRODUCTION

A
Background

Saddlebrook Corporation has developed and marketed a variety of DEC-based software for financial institutions. Among these packages is System M, a comprehensive mortgage origination and secondary marketing application. Sales of System M have been disappointing, and Saddlebrook's overall revenues have been below target. INPUT has been asked to evaluate the market for System M and recommend ways to increase its sales. This report presents a summary of INPUT's findings and recommendations.

B
Scope and Methodology

This study is limited to the System M product and its market. No assessment was made of other Saddlebrook products, their relationship to System M, or their markets.

The study involved five distinct steps:

- INPUT attended the Mortgage Bankers Association (MBA) convention in San Francisco to acquire general background on the market and evaluate both System M and the products of Saddlebrook's competitors on the exhibit floor.

- While attending the MBA convention, INPUT made arrangements to interview competitive vendors. After the convention, INPUT developed a questionnaire, reviewed it with Saddlebrook, and surveyed the vendors listed in Exhibit I-1. Some of the vendors which originally committed to interviews at the convention later on declined to participate; 9 interviews were finally completed.

Exhibit I-1	Vendors Contacted
Interviewed	*Declined Interviews*
Data Link	Fannie Mae
Eastern Software	Interlinq
FICS	MortgageFlex
FIserv	Professional Information Management
IRMS	
Lomas Information Systems	
SLIMS	
Software Development Corp	
SSI	

- After the vendor questionnaire was completed, a user questionnaire was also developed. Several parallel items were included in both questionnaires to test the difference between vendor and user perceptions on issues such as
  - pricing strategy
  - pre-sale consulting or support
  - level of user's data processing sophistication and capability
  - key benefits/features associated with system
  - key reasons to pick a specific vendor

- Saddlebrook provided INPUT with a list of prospective survey candidates, and interviews were completed with those firms listed in Exhibit I-2.

Exhibit I-2	Users Interviewed
Alliance Mortgage Corp	Jack Price, EVP
BankBoston Mortgage Corp	Steve Matheson, VP
Dime Savings Bank	Dan Murphy, VP
Directors Mortgage Loan Corp	Barbara Ehlers
Dominion Bancshares	Andrew Jezioro
First Interstate Mortgage	Lynn Hodson, SVP
Fleet Mortgage Corp	Patrick Thomas
Goldome Realty Credit Corp	Tom Brown
Home Savings & Loan Assoc	Karen Kotowski
ICM Mortgage Corp	Ken Blakeslee
Navy Federal Credit Union	Brian McDonnell
Salem 5¢ Mortgage Co	Joe Gibbons
Sears Mortgage Corp	Tom Lamb
Standard Federal Savings Bank	Greg Snell
Western Bank	Mike Mostrom

- INPUT also reviewed information on market trends, forecasts, etc. in its own library, its proprietary databases, and other material collected for this study.

- This report is the result of analyzing the data collected in the above 4 steps.

Copies of the two questionnaires are attached as Appendix A and B. All of the vendors and some of the users were reluctant to be interviewed unless they were assured that their answers would be held in strict confidence. In order to obtain their cooperation, this commitment was made to everyone who requested it. Even with this assurance, however, a number of vendors and users refused to participate.

In interviewing both users and vendors, the question of "what's in this for me?" was also common, and many firms did not wish to cooperate without some form of quid pro quo. After consulting with the President of Saddlebrook, INPUT agreed to make a "sanitized" executive summary of the survey available to each vendor and user who requested it. These summaries will be reviewed by Saddlebrook before they are issued to ensure that no confidential information is released, and that the competitors interviewed gain minimal advantage from the information they receive.

When soliciting these interviews, vendors were not told that users were also being interviewed, and vice versa. Therefore, respondent firms will get only one of the two survey summaries (vendor or user), and no information about the relationship between vendor and user perceptions or requirements.

It is important to note that this is a "zero-based analysis." The intent of this study was to assess the marketplace and recommend the best way to compete, without any prior consideration of Saddlebrook's current product line, marketing approach, or system development plans. Information about Saddlebrook was consciously limited to a System M product demonstration, review of the System M Overview manual, and the comments of users and vendors. To the extent that these recommendations cover plans or activities already underway at Saddlebrook, they serve to validate the importance of those efforts.

C
Organization of the Report

Chapter II, *Executive Summary*, provides an overview of the survey results and outlines recommendations for changes in the System M marketing program.

Chapter III, *Mortgage Industry Background*, provides an overview of the mortgage industry, including trends in the industry structure and their market implications for products such as System M.

Chapter IV, *User Analysis*, presents the results of the user interviews.

Chapter V, *Vendor Analysis*, summarizes INPUT's observations about competitive products exhibited at the MBA convention, and presents the results of vendor interviews.

Chapter VI, *Recommendations*, integrates the results of the user and vendor interviews and details INPUT's recommendations regarding System M. These recommendations include changes to:

- Product
- Service/Support
- Positioning
- Pricing
- Promotion
- Target Markets

II EXECUTIVE SUMMARY

A
Mortgage Industry and Competitive Outlook

The disappointing recent sales of System M are attributable to several factors, including:

- a decline in the underlying mortgage market
- increased competition in the market for mortgage-related systems and services

The mortgage industry outlook is not strong. Demographic and financial trends which produced a large number of new home purchases and refinancings over the last 6 years are changing in ways that will reduce the demand for mortgages by 25% to 40% in the next few years. In addition, the industry is already suffering from overcapacity, as firms which geared up for the volumes of the early to mid 80s face the consequences of the thrift industry excesses and the aftermath of the 1987 market crash.

Competition is strong and will continue to increase in both the mortgage industry and among the industry's system and service providers, due to a combination of

- consolidations of banks and thrifts, and the demise of bankrupt firms
- cost pressures on the surviving firms
- price pressures on system vendors

There will be fewer firms to target for systems and services, and both entrenched vendors and new firms have adopted a strategy of price competition to retain or gain market share.

B
User and Vendor Survey Results

Although there were a number of user- and vendor-specific observations in the surveys, there were also a number of significant points on which both parties were in general agreement, as well as some on which they had different perspectives.

Both agree that flexibility and ease of use are the key features required in a mortgage banking system. Beyond this point, however, most of the individual system characteristics cited were unique to a vendor's offering or a user's business situation.

There were differing opinions regarding what is important about a potential vendor organization. Vendors stressed how long they were in business and the size and financial condition of their parent as key characteristics, placing less emphasis on their knowledge of the business, the size of their customer base, and their general reputation in the industry.

Users, however, stressed knowledge of the business and the vendor's general reputation above the length of time the vendor had been in business. Also, users were more interested in an overall evaluation of a vendor's stability than in specific measures cited by the vendors. Several users pointed out that companies which have been in business for a long time can still disappear or drop out of the mortgage banking business at any time, and the fact that a firm has been in business a long time does not guarantee that it has either a good reputation or a solid knowledge of the industry.

Presale support was not a big issue with either users or vendors. Vendors generally indicated that they provided demonstrations, presentations, etc., as expected by users. However, users indicated that they were reluctant to have vendors support their requirements analysis, cost/benefit analysis, etc., either because they felt they could do it themselves or because they perceived the vendor had a conflict of interest that made objectivity difficult

Users and vendors were in agreement on the desirability of modular and unbundled pricing, with license fees based on the capabilities of the system. Users also wanted access to source code as part of the offering.

Although vendors generally provided a variety of support services, including hotlines, periodic new releases, customization, etc., users were uniformly unhappy with the service they received. This is one of the underlying reasons for the request to have copies of the source code. The user's primary service complaints were all associated with the lack of a timely response to their problems:

- limited hours of hotline coverage
- a long time before support personnel called back and addressed a problem
- unreasonably long lead times for system changes/enhancements

Surprisingly, most vendors identified only 2 or 3 firms as competitors, whereas users seemed to know many more firms in the industry. In addition, users provided much more detailed comments about vendors and their systems than other vendors were willing (or able) to provide. Lomas and CPI received the most mentions from both groups, and their systems seemed to be the benchmark against which most other offerings were compared.

Both Saddlebrook and MortgageFlex received the same number (2) of vendor mentions; and MortgageFlex was identified as a major vendor by only two out of 15 user firms. Given these statistics, it may be that MortgageFlex is less of a major competitor than was previously assumed.

Both vendors and users saw System M as a comprehensive and flexible package, and Saddlebrook as having an excellent reputation for industry knowledge and quality of service. However, most vendors had IBM-based product offerings, and most users reported having IBM mainframes. The two basic reasons given by users for not chosing System M were lack of IBM-compatibility, and cost. And several vendors cited the DEC base of System M as Saddlebrook's biggest competitive weakness.

C
Conclusions and Recommendations

In addition to market and competitive factors, the disappointing recent sales of System M may also be partially attributed to specific characteristics of the System M product offering. Nothing can be done about either the decline of the market or the increased competition. Therefore, Saddlebrook should focus on redefining its target market and changing the characteristics of its System M offering.

Non-IBM-compatible solutions in the mortgage banking systems market will become increasingly difficult to sell, especially among the larger firms with IBM mainframe installations. In addition, the large firm market appears to be over-targeted, with only 2 of the 9 vendors interviewed saying that this was not a part of their focus. Therefore, the two principal recommendations are to improve the level of IBM-compatibility, and shift market emphasis to mid sized and smaller firms.

It is important to remember that this is a "zero-based analysis." The objective was to assess the marketplace and recommend the best way to compete, without reference to Saddlebrook's current marketing approach or system development plans. Data about Saddlebrook was consciously limited to a System M product demonstration, review of the System M Overview manual, and the comments of users and vendors. To the extent that these recommendations cover plans or activities already underway at Saddlebrook, they serve to validate the importance of those efforts.

The set of recommendations is grouped into the following categories:

- Product
- Service/Support
- Positioning
- Pricing
- Promotion
- Target Markets

Product changes clearly require a good deal of planning and take a long time to implement. However, the other marketing recommendations can be implemented quite quickly, and it is suggested that these be given immediate priority while plans for product changes are being developed.

There are two separate reasons for implementing these recommendations:

- Some recommendations are based strictly on matching the competition. Other vendors have established positions, or offer services, that define a minimum standard of performance. Meeting these standards will not provide any competitive advantage, but failing to meet them will prove to be a negative factor in any competitive evaluation.
- Other recommendations are intended to provide a clearly differentiated product and service offering. These suggestions are intended to provide a competitive advantage for Saddlebrook.

Both categories of recommendations should be given serious consideration, and neither should be emphasized at the expense of the other. The recommendations are listed below, with detailed explanations and rationale provided in Chapter VI.

Also, it should again be recognized that Saddlebrook may already be implementing some of these recommendations. However, the purpose of this list is to provide a "zero-based" set of issues to be addressed, based on the characteristics of the mortgage banking software/services industry. The important thing is to use these recommendations as the baseline for evaluating Saddlebrook's current and future plans for System M.

1. **Product** (Long-term planning considerations)
   a. Consider rewriting System M for a PC/LAN configuration, or other IBM-compatible, distributed processing system
   b. Base any upgrades/rewrites on a standard 4GL/database system, where possible
   c. Carefully examine the application and minimize custom system code
   d. Consider adopting a Pick- or Unix-based approach
   e. Rewrite data entry using full-screen, table-oriented approach
   f. Provide a laser forms generation capability

2. **Service/Support**
   a. Establish 24 hour hotline coverage
   b. Commit maximum response times to specific categories of problems
   c. Assign Customer Account Reps to each client
   d. Ensure the quality and knowledge of support staff
   e. Develop a structured, modular package of pre-sale and implementation support services to be provided on a (billable) consulting basis
   f. Develop comprehensive, modular installation manuals, training materials, etc. to provide users with more low cost, do-it-yourself options
   g. Provide system tuning tools/procedures and periodic system performance review as part of maintenance service
   h. Develop a hardware upgrade program which makes it as cheap as possible for users to increase capacity/performance
   i. Consider developing a cadre of freelance associates that know the system and could be contracted to do custom work for users

3. **Positioning Emphasis**
   a. Industry experience and track record of firm
   b. Premium product

4. **Pricing**
   a. Establish at Mid+ Level
   b. Unbundle Services (training, implementation, customization, etc.)
   c. Modularize Pricing by Installed Functional Capability
   d. Freeze License Fees Based on Business Profile at Time of Sale
   e. Base Initial License Fees Partially on Business Profile
   f. Emphasize "Good Value for Your Money"

5. **Promotion**
   a. Continue Current Advertisements in Trade Press
   b. Continue and Upgrade Demos at Trade Shows
   c. Encourage and Aggressively Pursue Customer Referrals
   d. Consider Building a Promotion Package Around a System M Evaluation Based on the MBA Manual, *"Chosing a Loan Production System"*

6. **Target Markets**
   a. Reduce Focus on Top Tier
   b. Increase Focus on Middle and Lower Tier
   c. Emphasize S&L/Thrifts, Mortgage Banks, and Credit Unions; Decrease Focus on Commercial Banks

III MORTGAGE INDUSTRY BACKGROUND

A
Historical Setting

The first six years of the Reagan administration provided a favorable environment for the growth of the mortgage industry. Declining interest rates and a general economic expansion provided a healthy overall market for housing and mortgage financing throughout this period. Despite the regional problems in areas such as the oil producing states, the overall value of mortgage debt outstanding rose from $1,458 billion at yearend 1980 to $2,564 billion at yearend 1986.

Even these statistics understate the extent of growth in transactions. The six percentage point reduction in interest rates from 1982 to 1986 brought many people into the housing market who could not previously afford the high interest rates of the previous 3-5 years. In addition to spurring new construction, this interest rate reduction also created a wave of refinancing activity. Finally, changes in the tax law combined with innovations in mortgage-related financial products (e.g., equity take-outs, mortgage-backed consumer credit lines) to produce additional mortgage activity unrelated to the primary demand for housing.

B
Recent Trends

Since early 1987, however, the picture has changed considerably. Overall mortgage lending declined, affecting banks, thrifts, and mortgage bankers alike. With interest rates levelling off in 1986, the volume of refinancing peaked and then fell off again in 1987. Uncertainty over the future course of interest rates, the lessons of the oil patch, and fears about the impact of the twin deficits (trade and budget) have made the markets more jittery than in the early 80s, reducing the rate of new construction and the associated demand for new mortgages.

From their lows of 1986, long term interest have increased somewhat, widening an already large gap between traditional fixed-rate mortgages and the newer adjustable rate mortgages (ARMs). This has led to shift of lending patterns, reducing the proportion of traditional fixed-rate mortgages in favor of ARMs. Meanwhile, with the advent of ARMs have come a much wider variety of mortgage offerings, with variations on downpayment, starting rate, adjustment periods, rate caps, etc.

The advent of ARMs has made the origination process much more complex than it ever was before, since there are far more choices for a lender to present and a buyer to chose from. This has made the flexible, front-end origination system an important tool, both for selling buyers and managing the origination process.

ARMs have also affected the allocation of business between traditional mortgage lenders (banks and thrifts) and mortgage brokers. Because of the relative newness and complexity of ARMs, they do not yet have a well established secondary market. Since mortgage bankers generally specialize in fixed-rate lending and must package and sell their loans in the secondary market, they have lost market share to traditional lenders who can keep ARM loans in their portfolios. This has cause mortgage brokers to lose market share relative to the traditional lenders.

C
Demographics and Future Mortgage Market Trends

In addition to the favorable economic environment of the Reagan administration, the housing market also benefitted from a number of demographic factors, such as the baby boom and strong growth in certain regional areas. However, these trends have already started to shift in ways that negatively impact the housing market, and this negative impact is likely to continue over the next 10-15 years.

The number of first-time home buyers (mostly the 25-43 year-old age group) grew rapidly in the 1970s as the baby boom generation entered the market. This growth rate slowed in the 1980s and will slow still more in the 90s; from a level of 1.5 million per year at the present time, net new household formations will probably drop to a range of 1.1-1.2 million per year in the 90s. This trend will continue until the early 21st century, when the offspring of the first (postwar) baby boom start to enter the first-time buyer pool.

The baby boom population growth also helped spur high regional growth rates, as new families migrated to new and growing areas. With a reduction in population growth rates, there is also likely to be a reduction in artificial population migration as less pressure is placed on the housing supply of existing population centers.

The impact of tax law changes, interest rate reductions, and innovative financing practices has driven the growth in mortgages about as far as it reasonably can. Over the last 15 years, the mortgage debt burden has risen significantly, both as a proportion of disposable income and in relationship to the market value of the underlying equity (loan/value ratio). Aggregate mortgage debt has grown nearly twice as fast as the GNP for at least the last five years, driving the overall market loan/value ratio to a level equalled only once before in our history.

Even if the current level of mortgage debt (loan/value) is sustained, the market will grow more slowly in the future than in the past. More likely, growth rates will tumble even further as households reduce their leverage and return to more conservative financial practices. Any increase in interest rates will also have the same effect as houses become more difficult to afford.

D
Financial Institution Trends

Market pressures such as deregulation and bad loans are forcing a consolidation of the traditional mortgage lenders. Over the next few years, there will be a continued reduction in the number of financial institutions in this market The distinctions between banks and thrifts will also continue to erode as banks buy or merge with failed thrifts. The result will be an increasingly structured market, with three general categories of players:

- Small-scale institutions, often specialized in niche markets.
- Mid-scale institutions, many without the resources of large firms or the flexibility of small firms, trying to compete against everyone else in the market.
- Large-scale institutions with large capital bases and sophisticated information systems capabilities, able to achieve significant economies of scale in operations.

The advent of ATMs and telephone transaction capabilities has allowed institutions to reduce their reliance on "brick and mortar" delivery systems. With the laptop PC coming into its own, there will even more of a trend away from capital investments in fixed locations and an emphasis on flexibility and service to the retail customer.

These trends will impact mortgage banking in a variety of ways. Exhibit III-1 summarizes these effects on the three basic processing functions:

- Origination
- Portfolio Management/Secondary Marketing
- Servicing

E
The "Boutique" Origination Firm

In the origination area, there will likely be a trend toward specialization among smaller firms. These firms will only originate loans, selling everything they produce on a servicing released basis. Capital and systems/operations requirements are both small for this type of operation, allowing ease of entry and exit for small, local, entrepreneurial firms. In recent years, approximately three-fourths of the new MBA members fit this business profile.

Such firms often have close ties to the local Realtor community and can provide a level of flexibility and service that is typically lacking in a large traditional lender. In addition, as the complexity of the market increases through a wider variety of product offerings, rates, etc., the small independent firm can offer a wider variety of options than are unavailable from individual lenders, making it more likely that some kind of a program can be found to fit a prospective borrower's qualifications.

EXHIBIT III-1

PROCESSING FUNCTION CHARACTERISTICS

Processing Function	Type/Size of Institution		
	Boutique	Midsize	Large-Scale
Origination	• Primary Business • Field-Driven (Portable Terminals Taken to Prospects) • Flexibility Is Key (Multiproduct/Rate, etc.)	• Part of Full-Line Strategy • Directed from Existing Branches • Emphasis on ARM Products	• Part of Full-Line Strategy • Directed from Existing Branches • Emphasis on Fixed-Term Products
Portfolio Management and Secondary Marketing	• Commitment Control • Packaging and Disposal of Originated Loans • Few/No Loans Held in Portfolio	• Some Purchases and Sales to Balance Portfolio, or to Get Servicing Business • Most Originated Loans Held in Portfolio	• Wholesale Purchases and Sales Unrelated to Servicing • Portfolio Holdings Dynamically Managed as Part of Institutional Funding Strategy
Servicing	(N/A)	• Own Portfolio • Outside Portfolios • High Cost/Low Efficiency • Minor Line of Business	• Own Portfolio • Outside Portfolios • Low Cost/High Efficiency • Major Line of Business

F
Mid-scale Traditional Lenders

Mid-scale firms will generally be older, established institutions that have a significant investment in bricks and mortar, are not very entrepreneurial, and lack the capital and management to significantly expand their market and/or scale of operation. With generally stable deposit bases accounting for a large proportion of their liabilities, these firms will often retain and service a significant number of the loans they originate, buying and selling loans to balance either their loan portfolios or their servicing operations.

As "full-service" local institutions, these firms will be in competition will everyone else in the origination marketplace. However, they will often be at a competitive disadvantage with both larger and smaller firms:

- Smaller, less capital intensive firms can respond more easily and more profitably to changes in loan production volume. Having simpler systems and operations, they are also more flexible, able to respond more quickly and cheaply to changes in customer or market demands.

- Larger firms, with greater scale economies and decentralized business strategies, often have the flexibility of smaller firms combined with the resources to respond more rapidly and effectively to changes in the market.

In the area of portfolio management and secondary marketing, both mid-size and large firms face increasingly complex requirements. Because FASB 91 has made it more difficult to recognize the income from origination fees if a loan is retained in the firm's portfolio, many firms are both selling all the loans they originate and buying large numbers of other loans for their own portfolios. In addition, as the industry faces increasing profit pressure due to overcapacity, portfolio management and hedging provides an increasing proportion of the available profit opportunities.

G
Large-scale Traditional Lenders

Large scale firms will be involved in the mortgage industry in two very distinct ways. The traditional lenders will be involved in the three primary functions (origination, secondary marketing, servicing). In addition, specialty firms will continue to have a significant role in the servicing market.

Because of their large investments in brick and mortar, large scale traditional lenders will continue to use their branch offices as primary distribution systems. On the other hand, servicers such as Metmor (a subsidiary of Metropolitan Life) will continue to purchase large numbers of servicing portfolios and deal strictly on a wholesale basis with originating firms.

H
Implications for Mortgage Systems Vendors

A combination of economic and demographic factors will significantly reduce the size of the mortgage market from what it was during the first six years of the Reagan administration. This lower level of activity will last for at least the next ten years. If there is a significant increase in interest rates during this time, activity levels will be further reduced as first-time home buyers are no longer able to afford a mortgage and refinancing or equity take-out becomes much less attractive than at present.

The current overcapacity in the industry will put increasing cost pressures on existing operations, especially in mid-scale organizations. The industry will become more concentrated on the high end -- especially in the servicing arena, while becoming more competitive on the origination end where entry barriers are low.

There will be few successful vendors of servicing products, as the market is already near saturation. Large servicers will generally be running large IBM mainframes, and there will be no significant market for servicing systems on other platforms, except as part of an integrated system for mid-scale organizations -- a risky market.

As with the airline industry, deregulation of the banking industry will produce an increasingly complicated set of mortgage products and rates, which will tend to change dynamically. Meanwhile, cost pressures will increase. This will put a premium on systems which are both flexible and provide significant operational cost savings for the customer. Since much of the future market will be for small systems in small operations, there will also be a premium on simplicity and user-friendliness. Small customers will have neither the knowledge, the time nor the staff to perform system-oriented tasks, and training requirements must be minimal.

In a cost-sensitive, declining market with a number of well-established vendors, it will become increasingly difficult to charge premium prices for premium products. Price cutting to maintain market share will become the order of the day, even though cost is not the most important factor in the purchase decision.

There will also be a number of consolidations and departures from the market. This will both reduce the market opportunities for system vendors, and put their revenues more at risk. However, this situation also creates an opportunity for the vendor whose system is database-oriented and can easily import files from other systems during a consolidation or conversion.

I
Market Share and Sizing Parameters

There are no good primary statistics on the market shares of mortgage institutions, by size of institution. The following estimates are based on data from FRB, FHLB, HUD, MBA, and other institutions, and INPUT estimates. [1]

For purposes of this study, INPUT has grouped financial instutions by size of total assets, as follows:

Small:	< $25 million
Medium:	$25 - 500 million
Large:	> $500 million

The number of firms in each of these categories varies considerably by institution. Exhibit III-2 shows the number of institutions and branches by size category. [2]

While there are nearly 12 times as many small Commercial Banks as S&Ls, and medium sized Banks outnumber S&Ls by 3 to 1, there are approximately the same number of large institutions in each category.

On average, the medium sized S&L has nearly 40% more branches than the equivalent sized Commercial Bank, while the large sized Bank has 25% more than the large S&L.

Mortgage loans have recently (since 1984) accounted for approximately 60% of S&L assets, vs. less than 10% for Commercial Banks. However, the larger number of Commercial Banks makes them nearly equal S&Ls as a source of new mortgage activity. Exhibit III-3 shows the share of total 1987 residential mortgage loan originations by type of institution. [3]

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1. Number of institutions and branches as of June, 1986.
   Value of mortgage loan originations as of December 1987.

2. Of the 1,500 MBA members classified as mortgage banks, approximately 900 both originate and service mortgages; the remaining 600 originate only. Given the increasing split in mortgage banking between the small, boutique operation and the large servicers, the size distribution ratio of MBA member companies is assumed to approximate that of commercial banks, with the small/medium/large categories referring to loan origination volumes rather than assets. In addition, it is estimated that there are another 1,500 mortgage banks which are not MBA members; these are all included in the small size category.

3. Data for S&Ls/Thrifts and Coml Banks represent originations by branches or offices of these institutions.

   Data for Mortgage Banks includes all legally and operationally independent mortgage banking operations, no matter what the ownership. This would include independent subsidiaries of banks, S&Ls and insurance companies (e.g., Shawmut, Goldome), as well as the fully independent mortgage banks.

Exhibit III-2 **Size Distribution of Financial Institutions**

Institution/Size Category	# Inst	% Inst	# Brch	% Brch	Brch/ Inst
Savings & Loans, Thrifts, etc.	3,700		28,075		7.6
Small	420	(11%)	525	(2%)	1.2
Medium	2,770	(75%)	16,145	(57%)	5.8
Large	510	(14%)	11,405	(41%)	22.4
Commercial Banks	14,200		58,435		4.1
Small	4,825	(34%)	6,030	(10%)	1.2
Medium	8,820	(62%)	37,015	(63%)	4.2
Large	555	(4%)	15,390	(27%)	27.7
Mortgage Banks	3,000		(n/a)		
Small	2,100	(70%)			
Medium	840	(28%)			
Large	60	(2%)			

Exhibit III-3	Residential Mtge Loan Originations (1987, $ mill)	
Savings & Loans, Thrifts, etc.	$191,540	(40%)
Commercial Banks	$171,145	(35%)
Mortgage Banks	$112,500	(23%)
Insurance Companies, Other Inst	$6,980	(2%)

The difference in numbers of S&Ls vs. commercial banks, as well as the differences in their charters, leads to a situation where the average S&L in any size category has a larger volume of mortgage loan business than its counterpart bank. Exhibit III-4 shows how these loan originations are distributed by type and size of institution.[4]

By contrast with the banks and S&Ls, the estimated ratios for mortgage bankers are even more extreme. First of all, unlike the other types of financial institutions, mortgages are the basic lending product of mortgage bankers. Secondly, the smaller number of mortgage bankers as compared with banks or S&Ls means that mortgage bankers have higher average originations per institution.

4. Mortgage bank originations per institution are assumed to be distributed in approximately the same size category ratios as per institution originations by S&Ls and thrifts.

Exhibit III-4 Mortgage Originations by Type/Size of Financial Institution

Institution/Size Category	# Inst	% Inst	$ Orig	% Orig	$ Orig / Inst
Savings & Loans, Thrifts, etc.	3,700		191,540		51.8
Small	420	(11%)	890	(n/a)	2.1
Medium	2,770	(75%)	51,275	(27%)	18.5
Large	510	(14%)	139,380	(73%)	273.3
Commercial Banks	14,200		171,145		12.1
Small	4,825	(34%)	4,155	(2%)	0.9
Medium	8,820	(62%)	44,555	(26%)	5.1
Large	555	(4%)	122,435	(72%)	220.2
Mortgage Banks	3,000		112,500		37.5
Small	600	(70%)	13,725	(12%)	6.5
Medium	840	(28%)	48,085	(43%)	57.2
Large	60	(2%)	50,690	(45%)	844.8

IV USER ANALYSIS

INPUT surveyed 15 users for this study. This is a lower figure than was targeted. However, the responses came from a wide enough variety of organizations and were consistent enough to provide a reasonable level of confidence that the observations and conclusions are representative and valid for Saddlebrook's current market.

The surveyed firms were identified by Saddlebrook, and INPUT was provided with a list of names to contact. The firms included current customers, lost business prospects, current business prospects, and potential clients (firms which had not yet received a proposal from Saddlebrook).

Although INPUT attempted to contact nearly all the firms on the list, many did not return phone calls after learning the reason for the call. Others who were contacted declined to be interviewed for a variety of reasons including lack of time, lack of any perceived benefit to them, and staff changes since mortgage systems were evaluated.

This chapter presents the results of the user interviews, and is divided in two sections, as follows:

Section A, *Overall Patterns*, summarizes observations about the needs and concerns expressed by the users.

Section B, *Interview Results*, outlines the characteristics of the firms interviewed and summarizes the interviews, question by question.

A
Overall Patterns

Although there was a great deal of variation in the size of the firms interviewed, they were all large, multi-branch organizations; all but one did servicing as well as origination and secondary marketing.

Cost reduction and improved control were the two primary benefits which firms hoped to derive from their systems. And because of the rapidly changing nature of the mortgage market, operational flexibility was the key feature sought by most firms.

Users were often unhappy with the kind of pre-sale support they received from vendors. The two primary criticisms were that the support was often superficial, if not incompetent, and that the vendors were not objective and honest enough with the data they presented. Several users indicated that they felt the vendors' conflict of interest was too great to allow them to provide any support in areas such as requirements definition, cost/benefit analysis, etc.

Because users did not have consistent expectations about the kinds of pre-sale support they needed and expected, their perspective on this issue could be expected to be consistent. On the issue of operational support, however, there was strong general agreement that this was inadequate in three primary areas:

- *Availability* -- many vendors lack 24 hour hotline coverage
- *Response time* -- no matter what the problem, or how serious it is, vendors always seem to take too long to respond, address the issue, and solve the problem
- *Quality* -- support staff frequently lack proper knowledge (industry, application, systems) to solve user problems

Aside from cost and convenience, this lack of support is one of the reasons why users place a premium on a system's operational flexibility. It is also one of the reasons why users want to have copies of the source code and the freedom to make their own modifications to the system.

Although pricing was considered the least important of the vendor's system/support characteristics (as compared with system flexibility, operational support, etc.), users had definite ideas about how they wanted systems priced. There was general agreement that systems pricing should be

- *Unbundled* - separate pricing for individual products and support services
- *Modular* -- pricing based on installed capabilities of the system
- *Fixed* -- no change in costs (for already installed capabilities) after system installation, no matter how the user's operations or business volume change

Saddlebrook was generally given high marks for pre-sale support and the basic flexibility of its system by the users who were interviewed. However, System M was criticized for being too slow, too expensive, having a poor user interface, and not

being IBM compatible; a number of users reported dropping Saddlebrook from consideration solely on the basis of hardware compatibility. Also, Saddlebrook shared with other vendors the criticism that its support was inadequate.

B
Interview Results

1. Business Overview of Firms Interviewed

Exhibit IV-1 provides a statistical overview of the firms interviewed.

Exhibit IV-1	Sample Overview	
No of firms interviewed:		15
Scope of Activities		
Origination		100%
Secondary Marketing		100%
Servicing (OWN portfolio)		93%
Servicing (OTHER's portfolio)		66%
Size Range of Activities	*Min*	*Max*
Number of loans originated (thou/yr)	1.5	130
$ vol of loans originated ($mil/yr)	$150	$15,540
Number of offices originating loans	6	135
Loan origination staff	24	3,780
Number of loans in portfolio (thou)	5	450
$ vol of loans in portfolio ($mil)	$10	$15,700
Total number of loans serviced (thou)	9	500
Total $ vol of loans serviced ($mil)	585	$15,700

The majority of firms indicated that they sold nearly all the loans they originated; many had a policy to sell 100%. Most firms also bought a significant number of loans for their own portfolio, as well as acquiring significant amounts of outside servicing business. One of the reasons cited for selling a large portion of originated loans is a recent FASB policy which delays the recognition of servicing-related income on such loans.

All of these firms had multiple offices, and a significant number of staff involved in loan origination process.

2. Processing/Systems Background of Firms Interviewed

All but one of the firms which identified a mainframe vendor used IBM systems; the one exception (Dime Savings) used Unisys.

Several different minicomputer vendors were represented, including DEC, Honeywell, Hewlett-Packard and Wang.

The weakest area of automation was origination; several firms indicated that these operations were only partially automated, and/or poorly automated. This situation is not a function of size, as these firms were among both the largest and the smallest in the sample. One such firm which has experienced substantial recent growth said,

> *we have lots of experience in processing loan applications, but little experience in automation. Our mortgage operation is well established, but not historically well automated.*

3. Vendors/Packages Used

As expected with a group of large mortgage servicers, CPI was the most frequently utilized vendor; 2/3 of those surveyed used CPI for servicing. It was also used by over 25% of the firms to support secondary marketing -- often in conjunction with an in-house package.

Also as might be expected, the greatest number of different vendors (excluding in-house) was found in the origination function, and the least in servicing:

	Orig	Sec Mkt	Serv
Vendors Mentioned:	10	7	4

The apparent need for customization parallels the number of vendors mentioned. Most in-house packages and customized vendor packages were used in origination; custom solutions were least often mentioned in connection with servicing.

Half of the firms used in-house packages to support secondary marketing functions, and 1/3 used them to support origination. Secondary marketing was also the area where it was most common to use several different packages in support of one function. The typical reason for this was that one package is used for analysis and decision-making (e.g., SAS, Doc Baldwin), and another for managing the portfolio.

The two firms which used in-house packages for all their processing, one had no apparent interest in going to a vendor, and the other was giving up entirely and converting to Lomas.

4. Importance of Vendor Support/Service Characteristics

The most significant characteristics of a potential vendor relate to how well the vendor can meet the user's current and future needs.

Next in importance are issues relating to support for the installation and operation of the system.

The least important issues are pricing and pre-sale support/service -- both of which relate to marketing rather than system functionality and operational user support.

Exhibit IV-2 outlines the responses to the 8 questionnaire items.

Exhibit IV-2 **Importance of Support/Service Char**

(1 = Low 5 = High)

Support/Service Factor	*Avg Rating*
Ability to meet current needs	4.71
Responsiveness to need for syst enhancement	4.32
Operational service/support	4.14
Installation/implementation service/support	3.85
Ability to integrate w/other user systems	3.60
Ability to develop/deliver new systems	3.42
Pre-sale service/support	3.14
Pricing	3.14

5. Key Benefits Sought

The most important benefit users hope to achieve from a new system is operational cost reduction. Increased market penetration is a close second, although several firms indicated that this was a derivative benefit, not a primary goal.

Increased productivity, control and risk reduction were the next most frequently cited categories of benefit objectives, with productivity often being cited as an alternative to reduced cost. Data accuracy and integrity were cited as important aspects of the control issue.

Exhibit IV-3 groups the responses to this question into 8 broad categories.

Exhibit IV-3 Key Benefits Sought

Benefit Category	% of Times Mentioned
Reduced cost	57%
Increased market share/penetration	50%
Increased control of process/reduction of risk	36%
Reduced processing time/increased productivity	36%
Speed/quality of customer service	29%
Increased quality control	21%
More/better information	21%
Flexibility to handle increased volumes, restructure offices/operations, etc. at minimal cost	21%

6. Key Features/Characteristics of System

The single most consistent response to this survey was the importance of flexibility and ease of customization. As one firm put it, *"flexibility is 99% of the battle."* Ease of use and user friendliness were also frequently cited as important characteristics of a system.

In addition to such general goals as a flexible and user friendly system, many specific issues were cited, as shown in Exhibit IV-4.

Exhibit IV-4	Key Features Desired
Feature Category	
Flexibility/Ease of Customization	
Ability to easily add a wide variety of loan products	
Ability to respond to new regulatory reporting requirements	
Ability to add new fields to database without technical problems	
Ease of data manipulation (new/changed reports, etc)	
User Friendliness	
Good user interface	
Good documentation	
Other - General	
Speed	
Efficiency	
Centralized control of pricing	
Other - Technical	
Compatibility w/existing hardware	
Compatibility/ability to integrate w/other systems (e.g., G/L)	
Upward migration path (ability to easily increase capacity of syst)	
Ability to communicate between branches and headquarters	
Integrated system/single point of data capture	
Flow of data matching flow of work	
Relational database	
Laser printing of forms	

7. Key Features/Characteristics of Vendor

Knowledge of the industry, stability, and a broad, satisfied customer base were the most frequently cited characteristics of a potential vendor.

In addition to knowledge of the industry, users are also concerned about the vendor's technical flexibility, depth, and ability to respond to changing user needs. Several firms made the point that the size of the company and the number of years it has been in business do not necessarily guarantee that it is knowledgeable about, or committed to, the mortgage banking industry.

Although there were several proxies for stability (e.g., size of company, size of the customer base, years in business, financial position, "reputation"), they all related to the same issue: is the company going to stay in business and will it be able to service and maintain the system.

A well satisfied customer base is also a proxy for the kind of service which new users can anticipate. Many firms want to interview a number of other current users to see how effective the vendor's support has been.

Finally, a large customer base means that a user will not be a pioneer or "beta site" for a new and inexperienced vendor. This is an important consideration for large customers with many users and locations to coordinate.

8. Pre-sale Support Requirements

Some users took an independent position and insisted that they needed no pre-sale support from the vendor. Most firms, however, indicated that they wanted and expected the following things from potential vendors:

- Assistance and cooperation in defining the user's needs
- An appraisal of how well the system meets these needs
- Estimates of cost/capacity/performance factors in the use of the system
- Presentations and on-site demos of the system
- Assistance in developing a cost/benefit analysis
- Client references

A number of firms indicated that they desired to use a formal RFP (request for proposal) process, and expected vendors to be responsive to the RFP rather than attempting to circumvent it through personal sales pitches.

Although most users wanted several types of pre-sale support, many were also suspicious about the objectivity of the vendors. In particular, several users said that they would not pay anything for pre-sale consulting because they believed the vendors *"just want to sell something." "Too much B.S."* was another characterization of vendor pre-sale "support."

In addition to specifying the types of pre-sale support desired, the interviewees made the following points about the nature of this support:

- Overall competence in presenting their products is the main thing firms expect to see from vendors. It is important for the vendor to work well and communicate effectively with both end user and technical personnel. Many vendors are good in one area but not the other.

- From the end user standpoint, firms want to know how the capabilities of the system relate to the kind of business they do, and the way the do their business. Vendors are criticized for making too many abstract presentations that do not bear directly on the specific problems and issues facing the customer. As one firm put it,

  I need to know how the system works in a real-life situation.

- A strong technical element in the presentations is also desired by many firms. They want to understand the technical advantages and constraints associated with the system, and what kinds of flexibility and options it has to grow with their business. It is hard to get realistic projections of hardware/software requirements and system response times, but it is critical that these estimates be accurate.

9. Pricing Approach

Although pricing was considered clearly secondary to system performance and vendor support (Question 4), most users had strong opinions about the kinds of pricing structure they wanted to see. Three primary characteristics were consistently identified by users:

- Unbundled
  Separate and negotiable pricing for individual products/support services such as:
  - basic license fee
  - maintenance fee
  - training
  - conversion/installation support
  - modification/customization of system
  - consulting

- Modular
  Pricing based on the capabilities of the system; separate fee for each functional module, and the ability to include/exclude specific system capabilities.

- Fixed (at time of purchase)
  User costs should not change after installation, no matter how the user changes operations or business volume; i.e., no variable charges based on number of:
  - transactions
  - loans outstanding
  - terminals/users
  - processors
  - branches

A number of users also implied that they felt it was inappropriate to make the basic initial license fee a function of these variables. However, the most important issue was still their freedom to use the system any way they chose to after purchase without incurring additional costs.

Many users indicated that they wanted to get the source code so that they could make their own changes to the system. They also wanted the option of being able to purchase consulting support for modification/customization if they did not have the time or resources to do it themselves, with these services being available at a guaranteed price.

10. Key Decision-Making Criteria

The most important decision-making criteria cited were:

- *Functionality* -- does it meet the user's current and future needs
- *Cost* -- is the system's cost justified

In general, although some firms mentioned only one or the other, functional issues outweighed cost issues as the key decision-making criteria. Among those firms which mentioned some aspect of price or cost, this was often in the context of cost for specific functionality; i.e., cost/benefit analysis. Also, most of the additional issues which were raised had some specific aspect of functionality associated with them, such as:

- Quality/flexibility/maintainability of software
- Hardware compatibility
- Communications capability

Other significant items mentioned were:

- Time/effort required for conversion and implementation
- Consistency with the strategic direction of the firm
- User commitment to the project

11. Key Steps/Personnel Involved in Acquisition Decision

Every firm had a different approach to the decision-making process. But several themes were common:

- Small, high-level teams or task forces making the evaluation
- Teams composed primarily of users, or users taking the lead
- Systems organizations either participating in the team, or reviewing the work of the team, but not having the dominant role

Although each firm went through a specific evaluation process -- some more complicated and than others, it appeared that the process was often oriented towards the firm's internal approval requirements rather than a rigorous approach to specifying the users' needs. Only a few firms went to the extent of defining their requirements in a formal RFP (request for proposals), and few indicated they did a thorough job of identifying potential vendors to evaluate.

12. Other Vendors Considered/Primary Reasons for Chosing Current Vendor

Most firms evaluated a number of other vendors than the one they chose for each function. Although there were a number of comments that related to specific vendors or their packages, most of the responses could be grouped into several major categories.

Primary reasons cited for chosing a specific vendor included:

- Best functionality
- Ease of self-modification/customization
- Best user support
- New technology
- Strongest long-term position in market
- Sr. management comfort with specific hardware solution (Wang-based)
- Shift from service bureau to in-house use of same package to avoid conversion
- Integration of system (one package for all 3 functions)

Primary reasons for rejecting a specific vendor included:

- Cost
- Hardware incompatibility
- Excess capacity on existing hardware configuration
- Need to reconfigure existing communications systems to accommodate different hardware
- Limited functionality
- Difficulty of modification/customization
- Poor reputation for service/support

13. Primary Vendors/Strengths and Weaknesses

The two most frequently mentioned vendors were CPI and Lomas. CPI was referred to by a number of users as the "Cadillac of servicing." Lomas was also frequently mentioned as a servicing vendor. This is not surprising, since there were fewer servicing vendors than origination or secondary marketing system vendors.

Exhibit IV-5 lists the vendors in order of number of mentions. Specific user comments about individual vendors are included in Appendix C.

Exhibit IV-5 **Primary Vendors**

Vendor	*No of times Mentioned*
Lomas	10
CPI	8
Saddlebrook	5
Encompass	3
Omni	3
Data Link	2
Mortgage Flex	2
SLIMS	2
ADS	1
Computer Power	1
EDS	1
Gallagher	1
Hogan	1
Interlinq	1

14/15. Desired System Enhancements/New Products or Product Features

Most of those interviewed did not distinguish between system enhancements and new products or product features. The general feeling was that this is a packaging issue for the vendor, and it doesn't matter how the needed additions are provided. Nevertheless, the responses can be broken into those which relate to improving existing systems (Exhibit IV-6A, and those relating to the addition of new capabilities not found in any existing vendor's offerings (Exhibit IV-6B).

Exhibit IV-6A	Enhancements of Existing System Functionality
Lower operating cost	
Greater system flexibility - MIS-oriented (custom reports, additional data elements, file subset selection) - operations-oriented (new/changed loan products, new offices)	
Technical/performance changes (greater speed, distributed processing)	
Improved printing flexibility (remote sites, mag tape output, laser forms)	
Improved user-friendliness (more on-line functions, better interface)	
Improved help functions (better documentation, on-line help functions)	
Improved data accuracy (more/better edit checks of data)	
Improved security (add into application where operating system in insufficient)	
Additional functionality (not avail in current package, but in other packages) - document tracking, process/workflow control - secondary marketing/portfolio management	
Improved system integration (eliminate multiple data entry, file transfers)	

Exhibit IV-6B	New System Features
Automated credit bureau interfaces	
Artificial intelligence applied to underwriting	
Optical disk storage/records management interface	
REO (real estate owned) processing	
Bankruptcy management	

16/17. Specific Desired Services/Service Enhancements

In addition to standard basic operational support items such as system maintenance, upgrades, hotline, etc., users summarized their service requirements as follows:

Exhibit IV-7	Specific Desired Services
Effective pre-sale support - requirements definition - work/process flow analysis - good presentation of system capabilities/limitations - standard cost/benefit analysis (same approach applicable to other vendors) Joint systems development/modification/customization Training (user and technical) Implementation support Project management	

All of these items are associated with pre-sale or implementation activities which vary in quality and extent from one vendor to another.

Many users indicated *strong dissatisfaction* with the general level of operational support they receive form their vendors. Their complaints centered around 3 issues:

- Lack of 24 hour hotline support
- Slow response in all areas, from emergencies to general enhancements
- Poor quality support from inexperienced staff who do not know much about
  - mortgage banking
  - the vendor's software
  - the user's hardware and systems software

V VENDOR ANALYSIS

As part of the vendor analysis task, INPUT attended the MBA convention and reviewed the exhibits and product literature of Saddlebrook's potential competitors. After the convention, INPUT developed a questionnaire, reviewed it with Saddlebrook, and surveyed the vendors listed in Exhibit V-1. Some of the vendors which originally committed to interviews at the convention later on declined to participate; 9 interviews were finally completed.

Exhibit V-1	Vendors Contacted
Interviewed	*Declined Interviews*
Data Link	Fannie Mae
Eastern Software	Interlinq
FICS	Mortgage Flex
FIserv	Professional Information Management
IRMS	
Lomas Information Systems	
SLIMS	
Software Development Corp	
SSI	

This chapter is divided into three sections:

Section A, *Overall Issues*, provides several observations about the competitive vendors as a group, and the general nature of mortgage banking software products.

Section B, *Interview Results*, summarizes the interviews, question by question.

Section C, *Vendor Comments*, provides general comments and observations about each of the surveyed vendors.

A
Overall Issues

As a group, the vendors all seemed to emphasize that their systems were "flexible and complete." However, many vendors had specific comments about competitors' offerings, and these perceptions often contradicted the competitor's self-evaluation. In addition, user evaluations supported the fact that many companies offer less than what they claim.

Part of the problem is a lack of definition of the word flexibility. Users want at least two different types of flexibility:

- *Operational* -- the ability to change screen layouts, data entry prompts, etc., add or change products, offices, etc.
- *MIS* -- the ability to add or change reports, sort/classification categories, etc.

Each system has different capabilities in these areas. And each system starts out from a different baseline; some systems in their original unmodified form are a better fit for a given user's needs than other systems in their original, unmodified form. Thus, the importance of flexibility differs from one user to the next.

Among the vendors which had operational exhibits at the MBA convention, the most impressive shared three characteristics:

- convenient-looking laptop origination systems
- full-screen tabular data entry, taking advantage of all the capabilities of the PC display (reverse video, blinking, etc.)
- laser printing of a wide variety of origination forms

While some of these features might seem cosmetic, they serve as important as benchmarks in the client's mind; the vendor which either does not have them or does not demonstrate them is at a disadvantage vs. those that do. In the trade show arena, it is easy for a vendor to get "lost in the crowd." Hands-on demonstration of "grabber" technology is a good way to generate positive impressions that can lead to subsequent inquiries.

B
Interview Results

Since this was an open-ended questionnaire and interview process, the system characteristics and features are couched in the words of those interviewed rather than in terms of pre-specified categories. One of the primary advantages of this approach is that it reveals what the vendors think is important and what they are likely to emphasize in marketing their products.

The responses to each question are tabulated in a supporting exhibit. Entries in each exhibit are sorted by number of responses. Below each exhibit is a description and analysis of the pattern of responses. A more detailed tabulation of which firms provided which responses is included as Appendix D.

For convenience in reference, System M will occasionally be abbreviated to S/M.

1. Key Selling Features of Product/Service Offering

Exhibit V-2 **Key Selling Features of System**

Item Code/Description	No of Resp
1.01 Flexibility	6
1.02 Completeness	5
1.05 Integration of all aspects	3
1.04 Ease of use/simplicity	3
1.10 Table-driven syst	1
1.13 4GL System	1
1.06 Same funct as all compet svcg prod	1
1.14 Built-in security features	1
1.08 No duplication of data entry	1
1.15 Accommodates future growth/change	1
1.03 Svce Bureau + User SW license	1
1.16 Multi-version: PC to MF	1
1.12 No networking problems	1
1.17 Economical pricing	1
1.09 Sophistication of syst	1
1.07 Max functionality of PC-based svcg	1
1.11 ARM capabilities	1
1.18 Efficiency	1
1.19 Ease of customization/maintenance	1

The features mentioned most often are fairly general and relate to user-friendliness and ease of use. On average, each vendor listed two of the top four features.

The rest of the selling features are related to cost or operational benefits, or specific technical aspects of the system.

In positioning System M, it would therefore be valuable to both:

- emphasize the fact that S/M has all the basic advantages claimed by other systems, so as to ensure that S/M is not excluded from consideration vs. others
- emphasize other specific advantages of S/M, to establish a position of differentiation and comparative advantage vs. others

2. Key Selling Features of Organization

Exhibit V-3 **Key Selling Features of Organization**

Item Code/Description	No of Resp
2.03 Long time in business	6
2.01 Strong fin condition/large parent	5
2.02 Large customer base	3
2.04 Strong knowledge of mtge bnkg bus	2
2.05 First to intro mtge loan pkg on PC	1
2.06 Specializes in very large portfolios	1
2.08 High level of service	1
2.07 Excellent corp reputation in DP	1

The three features mentioned most often emphasize the stability of the vendor and the likelihood that it will remain in business to support the prospective client. The next important item, mentioned by only two vendors, was a strong knowledge of the mortgage banking business. These are all areas in which Saddlebrook has valuable credentials.

All the other responses were supportive or additional to the basic claim of stability, as each vendor which cited one of the minor corporate advantages also claimed at least of the major ones as well.

This is another case in which it is important to ensure that the S/M marketing message stresses both common and unique features:

- emphasizing the fact that Saddlebrook has been in business for some time and has a large customer base, to indicate stability .
- emphasize other specific advantages of Saddlebrook and S/M, to establish a position of differentiation and comparative advantage vs. others.

3. Characteristics of Client Base and Target Markets

Exhibit V-4 **Client Base and Target Markets**

Item Code/Description	*No of Resp*
3.01 Origination	9
3.02 Secondary mktg	8
3.03 Servicing	6
3.14 Mtge bankers, wholesale Coml Bank	9
3.12 S&Ls, Thrifts	9
3.11 Coml Banks	6
3.13 Credit Unions, etc	3
3.21 Top 200	7
3.22 Medium	5
3.23 Small	4

All vendors had origination systems, and other than Eastern Software, all had secondary marketing support capabilities as well. In addition, 2/3 of the vendors said they supported servicing as well.

All vendors were targeting mortgage bankers, the wholesale side of commercial banks, and the S&L/Thrift market. However, only 2/3 were targeting the retail lending side of commercial banks, and only 1/3 targeted credit unions.

All but two of the vendors indicated they were targeting the "top 200" institutions -- and four firms said this was their exclusive market. Of those four targeting the top 200 exclusively, three had servicing as part of their offering. Meanwhile, only 1/2 of the vendors indicated they were focussing on the medium and small firm market.

While the marketing costs of targeting smaller firms may be high relative to the size of the sale, it appears that the top end is overtargeted by large players and provides less of an opportunity than the rest of the market.

4a. Identification of Primary Competitors

Exhibit V-5 **Primary Competitors**

Item Code/Description	*No of Resp*
4.06 Lomas	4
4.10 CPI	4
4.01 DataLink	3
4.11 Contour	3
4.07 SLIMS	2
4.12 Interlinq	2
4.14 Fannie Mae	2
4.15 Saddlebrook	2
4.16 MortgageFlex	2
4.03 FICS	1
4.09 SSI	1
4.13 MOMS (?) HP/Cobol	1
4.02 Eastern Software	0
4.04 Fiserv	0
4.05 IRMS	0
4.08 S/W Devel	0

Lomas and CPI appeared to be the primary competitors identified by the other vendors, followed by Datalink and Contour. Saddlebrook was one of five companies which was mentioned only twice (by Lomas and SSI) as a competitor.

Four of the nine vendors interviewed were not mentioned as competitors by <u>any</u> of the other firms, and another three were mentioned only once.

It appears that only Lomas and Software Development were aware of most of the firms in the market and considered a significant number of them to be competitors. On average, all other firms mentioned only two others as competitors.

Since we did not ask separate questions such as: (1) who are the player in the market; and (2) who do you consider your competitors, it is not possible to determine whether Saddlebrook's low rate of mention is based on:

- lack of awareness of Saddlebrook's existence and presence in the market
- lack of meeting Saddlebrook as a competitor in specific marketing situations
- a perception that Saddlebrook's offerings are not competitive with theirs

A more detailed examination of the individual vendors' responses to this question (Appendix D) will yield further insights into the pattern of competitors' perceptions of each other. The important thing to notice is that Saddlebrook is not considered one of the leading competitive firms by most of the vendors we interviewed.

4b. Competitor Strengths and Weaknesses

Exhibit V-6 **Competitor Strengths/Weaknesses**

Item Code/Description	No of Resp
4.21 Not on-line, realtime	4
4.30 Archaic software	4
4.23 Not as complete functionality	3
4.28 Organizational maturity	3
4.31 Not strong in sec mktg or svcg	3
4.34 Large size	3
4.27 Not flexible	2
4.22 Poor reputation for custom service	1
4.24 DEC-based system	1
4.25 Small org focus-trouble w/lge orgs	1
4.26 Not database	1
4.29 Expensive pricing	1
4.32 No growth path to larger syst	1
4.33 Strong in PC business	1
4.35 IBM mini-based only	1
4.36 Primarily service bureau	1

Specific strengths and/or weaknesses were ascribed to every firm identified as a competitor. Old software and the lack of on-line, real-time processing were the two most frequently mentioned weaknesses associated with competitors products. Incomplete functionality and weaknesses in secondary marketing and servicing were also cited as significant defects for several vendors' offerings.

The remainder of the disadvantages cited were generally company specific, and related to individual technical, operational or cost characteristics.

Organizational maturity and large size were the most frequently cited competitor advantages, with Saddlebrook receiving one of the mentions for organizational maturity.

5. Distribution Channels

Exhibit V-7 **Distribution Channels**

Item Code/Description	*No of Resp*
5.01 Direct sales force	8
5.05 Referrals	2
5.04 Telemarketing	1
5.03 Sales by other firms	1
5.02 Co-marketing agreements	1
5.06 Advertising	1
5.11 Hardware reseller	4

All but one of the firms interviewed said they relied on direct sales forces as their primary distribution channel. The one exception (FICS) indicated that, although all their sales were direct, they were generated primarily through advertising and referrals.

Only one other firm cited referrals as a source, and FICS was the only firm that indicated a reliance on advertising. Other options such as sales by other firms, co-marketing agreements, and telemarketing were cited by only one firm in each instance.

Nearly half the firms interviewed indicated that they also served as hardware resellers. This approach provides the vendor with several options which should be considered in evaluating competitors' strategies:

- generate extra profits by taking a margin on hardware as well as software
- pass the VAR (reseller) discount on to a buyer who needs incremental hardware, thus providing a more attractive total package

Most of the reseller advantages are probably relevant only with smaller customers, or with turnkey systems. The larger firms are not going to buy mainframe hardware through an VAR, and they generally have bulk purchasing arrangements that give them discounts on personal computers. Due to the wide popular acceptance of IBM-compatible PCs, it is likely that such equipment (including laptops, LANs, file servers, etc.) will provide the best opportunity for VAR sales.

6. Promotional Activities

Exhibit V-8 **Promotional Activities**

Item Code/Description	*No of Resp*
6.02 Tradeshows/exhibitions	9
6.01 Advertisements	8
6.03 Mailings	2
6.04 User groups	2

Despite the fact that only one firm indicated advertising as a source of sales, all but one small firm does use advertising as a means of promoting their system. The major promotional activity is clearly trade shows and exhibitions.

While both of these activities promote name recognition, they also appear at the same time and place for all vendors, making it particularly challenging for one vendor to distinguish itself from the rest.

7a. Positioning Strategy

Exhibit V-9 **Positioning Strategy**

Item Code/Description	*No of Resp*
7.01 High-end/premium product	4
7.04 Moderately priced	3
7.02 Low cost	3
7.03 Complete functionality	2
7.10 Mid-range product	2
7.06 PC-based	1
7.09 Value for cost/get what you pay for	1
7.08 Quality-oriented	1
7.07 Low operating/use cost	1
7.05 Optional services/separately priced	1
7.11 Continuous prod devel	1

Nearly half the vendors feel that they have positioned themselves as offering a high-end, premium product. At the same time, 2/3 of them indicate that they offer a moderate or low cost solution for the user, including 2 of the 4 "premium product" vendors. While these two positions may seem inconsistent, they reflect the realities of an overly competitive market. One premium vendor indicated that their strategy was to maintain market share at all costs, and they would cut prices aggressively if it were necessary to meet their share goals. Another vendor with a fairly new product indicated that it was underpricing its product in order to gain market share.

The remainder of the responses generally relate to user management concerns such as cost, quality, etc.and are more akin to specific product characteristics than to general product positioning statements. Although there appears to be some overlap in the responses to this question and item 1, Key Selling Features, the answers to item 1 generally focussed on technical features rather than these cost/quality issues.

7b. Target Market Criteria

Exhibit V-10 **Target Market Criteria**

Item Code/Description	*No of Resp*
7.22 Stable/in business for some time	2
7.26 Cust familiar w/HP, other minis	1
7.23 Lge enough that no trng rqd	1
7.30 IBM mainframe users	1
7.28 Cust who need flexibility	1
7.25 Identify unmet needs of top 500	1
7.24 Meet needs of small/med size cos	1
7.21 Good base of loans	1
7.29 Based on demand as f(int rates)	1
7.27 Formal market research studies	1

There was no consistent pattern to the way vendors indicated they targeted potential customers, and most of the responses seemed to relate to specific capabilities or preferences of the vendor rather than the customer. Two firms indicated a strong preference for clients that were stable and had been in business for some time. Only one firm indicated that it used formal market research studies.

7c. Identification of Prospects

Exhibit V-11	Identification of Prospects
Item Code/Description	*No of Resp*
7.41 Industry/Association directories	4
7.42 Referrals from customers	3
7.43 Cust come to them (no telemktg)	2

Few vendors indicated any structured approach to identifying prospective clients. Less than half said they used industry or association directories, and 1/3 said they used referrals from customers.

One vendor indicated that top-level contacts were a key element of its marketing strategy. This vendor (FIserv) targets large firms and has positioned itself as offering a mid-range, quality-oriented product which delivers good value for the cost. Using both industry/association directories and customer referrals for targeting, This vendor (FIserv) targets large firms and has positioned itself as a mid-range, quality-oriented product which delivers good value for the cost. FIserv this vendor goes directly to the top of the prospect organization to introduce itself and its capabilities. Once the prospect is qualified as having a need and interest, FIserv's President becomes actively involved in the sale.

8. Desired Client Processing/Systems Background

Exhibit V-12 Client Processing/Systems Background

Item Code/Description	No of Resp
8.03 IBM mainframe	3
8.01 Makes no difference	2
8.04 Clients that like automation	1
8.02 Size > 20K loans	1
8.05 Big plus if already using HP	1
8.06 Not autom/piecemeal autom	1
8.07 Size > 5K loans (cheaper in-house)	1

One third of the vendors have IBM mainframe packages and do not target firms that use other systems. By contrast, several of the smaller vendors indicate that users' systems and/or operations background makes no difference to them.

Two vendors indicated a preference for large clients. One of them, with an IBM mainframe system, indicated that large volumes were necessary to offset the cost of the software license costs involved. The other vendor argued that large volumes were necessary to justify an in-house system instead of a service-bureau approach.

Two vendors held opposite views on the desirability of client experience with automation. One indicated that it wanted "clients that like automation," while the other preferred clients with no automation or piecemeal systems.

9. Pre-Sale and Installation Support Provided

Exhibit V-13 **Pre-Sale/Installation Support**

Item Code/Description	*No of Resp*
9.04 Demos in cust office	4
9.07 Requirements study/consulting	3
9.05 Training	3
9.08 Customization of system/reports	3
9.01 Provide system overview	2
9.09 Technical analysis	1
9.11 Presentations	1
9.02 Determine customization rqts	1
9.03 Toll-free phone no for quest	1
9.10 User cost/benefit analysis	1
9.06 Det anal: is prod right for cust	1

This question was originally intended to focus on pre-sale marketing support to the customer's decision-making process. However, a number of vendors included some post-sale, implementation oriented activities such as training and customization in their response.

Less than 1/2 of the vendors indicated they would provide in-office demos or presentations to prospective clients, and only 1/3 indicated that they provided training and report customization. Several different types of analysis were mentioned, such as cost/benefit, technical/requirements, etc., but no strong patterns appeared here.

10. Items Delivered/Maintained

Exhibit V-13 **Items Delivered/Maintained**

Item Code/Description	*No of Resp*
10.1 Software	8
10.2 Service bureau	3
10.5 Turnkey systems	3
10.4 Hardware	3
10.6 Data center report printing	1
10.8 Network hubs	1
10.7 Remote site report printing	1
10.3 Terminals	1
10.9 PCs	1
10.10 Laptops	1

Only one of the vendors interviewed (FIserv) was a pure service-bureau provider. The others all provided software at least. FIserv indicated that it provided several delivery options, such as printing either at its data center or at the customer site (remotely). It also indicated that it supplied the terminals used by its customers.

Of the eight vendors who provided software, 1/2 indicated they would also provide either hardware or a turnkey system. Only one vendor indicated that they would provide network hubs, etc.

While only one vendor specifically indicated on this questionnaire that they provide PCs (standard and laptop) as part of their standard offerings, nearly all the vendors interviewed at the MBA conference said they would provide such equipment if the user requested it.

11/12. Ongoing Maintenance/Support Services

Exhibit V-14 **Ongoing Maintenance/Support**

Item Code/Description	*No of Resp*
11.3 New system releases	8
11.1 Phone hotline	7
11.4 Training/documentation	6
11.6 Emergency bug fixes	4
11.7 Additional customization of syst	3
11.10 Regulatory updates	3
11.12 Remote/on-line diagnostics	2
11.2 Technical support	2
11.5 User group meetings	2
11.9 Ongoing product planning/devel	1
11.11 Assigned account reps	1
11.8 Loaner hardware if necessary	1
12.1 H/W & syst support for VAR items	1

As one would expect, all vendors indicated they provide either new system releases and/or regulatory updates. A large majority also indicated they provide telephone hotline support and training/documentation for the user.

Other items cited were generally unique to one or two companies and reflected either the company's marketing approach (assignment of specific account reps, user group meetings, loaner hardware) or its technical capabilities (remote on-line diagnostics).

Only 3 (1/3) of the vendors indicated they would provide additional customization of the system. This seems to be a system-related issue. The majority who do not offer such services indicate their systems as being flexible and complete in response to item 1. Two of the three who do provide customization did not indicate flexibility, ease of use, or integration of all aspects as features of their systems, and none of them were table-driven or 4GL-based.

Not surprisingly, the one vendor who preferred non-automated clients (item 8) is also a VAR, and is the only one providing both hardware and system software support for these items as well as its own system.

13. Pricing Approach

Exhibit V-15 **Pricing Approach**

Item Code/Description	*No of Resp*
13.1 Sep priced syst modules/prods	6
13.3 Sep priced support svcs	5
13.5 Svce bureau price - # of loans	3
13.7 Syst price based on H/W config	3
13.9 S/W base price + LAN pricing	1
13.6 Discounts for multiple module purch	1
13.2 Single price for syst license	1
13.4 Syst price based on # of loans	1
13.8 Liv exp for travel	1

Most vendors' pricing seems to be modular and unbundled: 2/3 of the vendors have separate charges for each module or product used, and the majority charge separately for support services. In addition to charging separately for each software module used, several firms also based their charges on the hardware configuration (e.g., number of terminals, size of LAN).

Other than service bureau operations, which charge on the basis of transactions processed, only one firm charged directly on the basis of the client's business volume, and then only for servicing.

14/15. Revenues and Installation Rates

Most vendors were reluctant to provide data on installations and revenues, and those which did insisted that the information be treated in strict confidence. However, the following summary observations can be made from the data obtained:

- Except for the new companies starting out with a small base, most firms projected growth of 10-15% per year in number of installations.
- The total number of reported installations ranged from 7 for a new company to 3,000 for a well-established firm with a PC-based origination system.
- The least expensive system cost reported was $5,000 per installation on the PC-based origination system.
- The most expensive system cost reported was $150,000 for a mainframe package which included a servicing capability. This vendor offered a range of products from PCs to mainframes, and targeted small to medium sized mortgage banking firms (100,000 loans and below).
- From 60% to 75% of the installation revenues were derived from the initial license fee; the remaining 25% to 40% came from unbundled services such as training, conversion assistance, customization, etc. Ongoing maintenance revenues are not included in this distribution.

C
Vendor Comments

The analysis presented here is based on several sources:

- observations made at the MBA convention
- product literature supplied by the vendors
- the vendor's own responses to the questionnaire
- other vendors' observations about their competitors

Since this was a free-form interviewing process, the responses are not broken out into specific, predefined categories and the vendors were free to tell us what they thought was important about themselves, their offerings, and their competition . As a result, where several vendors' offerings have common characteristics (e.g., product based on a 4GL), this commonalty may not show up if all vendors did not consider this equally important and give it equal weight in their responses.

This section is organized into alphabetical sequence by vendor. The aggregate tabulation of vendor responses contained in Appendix D has also been broken out into separate tables by vendor, showing just those entries relevant to each. These tables are contained in Appendix E.

1. DataLink

DataLink is a subsidiary of Mellon Bank and considers this to be one of its primary competitive advantages:

- it is part of a large organization with a strong financial position
- Mellon has an excellent and well known reputation in the data processing field
- both Mellon DataCenter and the DataLink activity have large customer bases

DataLink both operates a service bureau and licenses its software. Its has a full function IBM mainframe package (origination --> servicing) which it targets at the top-tier banks and thrifts. It is one of the only vendors to use mailings as a part of its promotion strategy (though without much success), and the only one which indicated it had co-marketing agreements with other vendors that service the S&L market. In addition, much of its business comes from current client referrals.

While DataLink positions itself as offering complete functionality in a modular system, and considers the flexibility and completeness of its system to be among its primary competitive advantages, this was disputed by other vendors who cited these as DataLink's weaknesses rather than as strengths.

DataLink considers Lomas and CPI to be among its chief competitors, and was mentioned as a competitor by Lomas, SLIMS, and Software Development Corp.

As part of its targeting strategy, DataLink looks for firms with a large base of loans that have been in business for some time. Aside from being able to deal with a stable, mature customer, one of DataLink's objectives is to minimize the amount of training required.

Pre-installation support activities such as installation, training, conversion, etc. are all included in the license fee. Addition post-installation/conversion services are separately charged.

Service bureau pricing is based on the number of loans processed. For clients who use the system in-house, there is a single license fee for the entire package; individual modules are not separately priced, although additional services are available for a fee to both service bureau and license customers.

2. Eastern Software

Eastern Software has been in business over 11 years and believes its knowledge of mortgage banking is one of its key selling features.

Eastern's package handles origination only, but has interfaces designed to hand off data to other systems for secondary marketing and servicing. Among its claimed advantages are its completeness, and its simplicity and ease of use.

Eastern does not have any specific target markets; it tries to sell to any and everybody who might be interested. In the past, most of its customers have been small and medium sized firms, but has recently started to acquire large customers as well.

Eastern identified Contour and Interlinq as its chief competitors, but no one mentioned Eastern as a competitor.

Since Eastern offers only a front-end system which can interface with any vendor's back-end processing system, it makes no difference what kind of hardware the client has. Since Eastern's package is IBM PC-compatible, it can run on laptop systems, individual desktop PCs, or in networked configurations. Eastern will supply any and all the products and/or services the client requires to get the system up and running, including hardware, networks, etc. If desired, it will install turnkey systems, or install its system on any combination of vendor- and client-furnished equipment. Loaner equipment can also be supplied if necessary.

Eastern's product is highly modular, and all of its components are separately priced. Discounts are offered for the purchase of multiple modules. In addition to a normal complement of support functions (hotline, new system releases, etc.), Eastern also provides training for a separate fee. It will also customize its application to fit specific customer needs (for an additional fee).

3. FICS (Financial Industry Computer Systems, Inc.)

FICS offers a full function package which is claimed to be well integrated. Its PC based origination system is claimed to offer the most functionality of all PC products on the market, and its servicing system is supposed to have the same functionality as any competitor's servicing product. One of FICS' key selling points is the claim that it was the first to introduce mortgage banking products on PCs.

FICS positions itself as a low cost premium product, offering "everything the other guys do" but at a lower cost because the systems are PC based. Like Eastern, FICS says that it targets anybody/everybody in the traditional market. It also targets insurance companies who service their own loan portfolios. Despite this broad current targeting, most of its current client base is in small to medium sized mortgage banking firms. This was the arena it originally emphasized and this is also the area where it is spending most of its current marketing effort.

Of the vendors interviewed, only Software Development Corp identified FICS as a competitor. FICS believes it has no competition in integrated systems. In origination and secondary marketing products, Contour and Interlinq were the only firms FICS mentioned as competitors, with Contour being cited as having a poor reputation for custom service. In the servicing area, SLIMS was mentioned as the primary competitor with the claim that SLIMS does not offer as complete a product.

FICS believes that it is important to include both advertising and trade show exhibitions in its promotional efforts. All of its sales are direct and the majority come from advertising and promotional efforts; the rest come from referrals.

Because its systems are PC based, potential clients do not need any automation experience or even a data processing department. However, this means that customers require more training than they otherwise would. As a result, FICS must put a great deal of pre-sale effort into making sure that its products are right for each potential customer.

FICS pricing is completely unbundled, with separate charges for the license, training, maintenance, etc. The license fee depends on the configuration (number of workstations, etc.) Approximately 1/2 of its installations are on standalone systems, the other half on Novell networked workstations.

4. FIserv, Inc.

FIserv is the only one of the vendors interviewed that operates exclusively as a service bureau. A nationwide company, with 15 data centers throughout the United States, it offers a full function package which it markets to the top tier banks and S&Ls. FIserv specializes in organizations with very large portfolios, with the average customer having approximately 25,000 accounts.

FIserv sees the flexibility and completeness of its offerings as a major competitive advantage. In addition, they emphasize specific advantages such as its sophistication and flexibility (table driven), and the advantages of an integrated system (no duplicate data entry or file transfers). On the corporate side, FIserv stresses that it is a very large organization which has been in business for a long time.

Lomas and CPI were cited as its primary competitors, while none of the other vendors indicated they considered FIserv a competitor.

FIserv positions itself as a quality oriented, mid-scale product: "you get what you pay for." It also make a point that its strategy is to grow with industry trends to become the "premier, national provider of data processing services and related products to the financial industry." In keeping with this strategy, it emphasizes that its profits are redirected into the business, funding continuous product development and service expansion.

FIserv makes an aggressive effort to learn about the business mix and systems resources of its target clients (top 500 financial institutions), and to identify what more FIserv can do for them. Its sales approach is high level, targeting the CEO, CFO or President and often involving FIserv's President as well. The ideal client is one which is profitable, well established, and "likes automation."

As a service bureau, pricing is based on the number of accounts processed or maintained, with separate rates for origination, secondary marketing and servicing products. Once the customer has signed a contract, 22 days of training are provided before the conversion. New system releases are installed every 2 months, and FIserv guarantees that its systems are always kept in compliance with current regulatory requirements.

5. IRMS (Information Resources Management Systems) Corp

IRMS is a small firm which markets an origination and secondary marketing system based on Hewlett-Packard minicomputers and written in Cognos,a 4GL. Its key selling features are said to be its flexibility and its ease of use. Being 4GL-based, the customer can use the Cognos report writer to generate custom reports. This characteristic also makes it easy to update the system to incorporate new offices, loan products, etc., and integrates all of the system modules, eliminating file transfer operations and redundant data entry.

Being based on an H-P mini, the system has built-in security features not found on PC-based systems. In addition, it is presumably easier to operate as a distributed system than an alternative configuration based on networked PCs (most installations support between 6 and 20 users).

IRMS focuses on S&Ls and mortgage banking firms, but does not care how large or small the organization is. Stressing its specialized knowledge of the mortgage banking field, IRMS markets jointly with H-P and also serves as an H-P VAR. However, its system can also be run on Data General and DEC equipment.

No other vendors identified IRMS as a competitor. Being H-P oriented, the only competitor identified by IRMS was MOMS*(?)*, an 8 year old Cobol-based system. With no other perceived competition in its market, IRMS has positioned itself as a medium-priced product and emphasizes the advantages of its 4GL origins.

IRMS provides the normal complement of support functions (training, hotline, new system releases, etc.) as separately priced options. The software license fee is based on the size of the computer configuration. Because of the user flexibility provided by its 4GL base, IRMS has not yet addressed the need to customize its system. However, it is currently looking at this option.

6. Lomas Information Systems

Lomas Information Systems is a subsidiary of the Lomas Financial Group, a large diversified financial services organization with interests in mortgage banking, retail banking, life insurance, and commercial leasing. Lomas provides a full function mortgage banking system on both a service bureau and license basis, and the size, stature and experience (Lomas has provided mortgage processing services since 1969) of the company make it a major competitor in the field.

Lomas positions itself as a premium system provider and emphasizes the integrated, prequalification-to-payoff coverage of its system. The firm currently targets medium to large size clients in all types of organizations, and uses internal market research to determine what specific groups to focus on. Its front end system (the old Symbolics package, originally sold to top tier firms) has recently been sold to medium sized firms, but is now being more actively pitched to larger companies. The front end package was originally sold to small companies, but the target is now shifting to medium sized firms.

The other service bureau providers interviewed, Data Link and FIserv, both cited Lomas as a competitor, as did Software Development Corp. In the servicing arena, Lomas identified CPI and DataLink as its major competitors, with Saddlebrook, SSI and Fannie Mae being mentioned as front end system competitors.

In addition to its own direct sales force selling both the software and service bureau processing, Lomas has an agreement with EDI to offer its front end system through their service bureau (EDI also offers FIserv products). Lomas systems are IBM-based, and the company remarkets IBM 9370 and 4300 systems as part of its product offerings.

Lomas provides potential clients with consulting support on requirements analysis, and tries to sell those where they see their products are a good fit. Training and customization of the system are also a part of their implementation support services. Lomas has 90 people on its implementation/support staff. In addition to a help desk which provides first line response to problems, each client is assigned an account representative who handles longer term support issues. For those accounts where Lomas has provided the hardware, the Lomas help desk also functions as the first line support for hardware and system software problems.

Lomas has an unbundled pricing scheme for its front end products, with separate fees for the basic software license, installation support (documentation, training, etc.), and maintenance. The price of these services is also based on what modules are sold. Instead of license and maintenance fees for its back end products, Lomas imposes a per loan charge which includes maintenance.

7. SLIMS

An 8 year old firm which provides financial and lending systems to financial institutions, SLIMS has over 300 customers for its Unisys-based systems. As a subsidiary of Norrell Corporation, a half-billion dollar services firm, SLIMS has a strong financial base.

In addition to selling its own systems through a direct sales force, SLIMS also remarkets Unisys hardware. SLIMS positions itself as offering a high end, premium product and touts the flexibility of its full function system and the ease of its end user interface as its major competitive advantages. The top tier of S&Ls and mortgage banks form its target market, and SLIMS gets much of its business through referrals from existing customers, and from client-initiated inquiries.

For the most part, SLIMS attempts to market to firms which are not automated at all, or have only piecemeal automation. More recently, however, it has been getting inquiries from firms which are looking to upgrade their current systems.

SLIMS identified Mortgage Flex and Data Link as it primary competitors, and was cited as a competitor by FICS and Software Development Corp.

As part of its marketing approach, SLIMS provides demonstrations, technical systems analysis and user cost benefit analysis. These services are particularly appropriate for the unsophisticated client base which forms its target market. Once the system is installed, there is an 800-number hotline available from 8am to 7pm (EST), and the customer service reps can run remote diagnostics to determine the cause of a user's problem. Since it operates as a Unisys VAR, it also assumes the responsibility for hardware and system software maintenance on any hardware which was purchased from it.

System license fees include a base price for the software, and a separate addon for the size of the LAN (number of PCs). Maintenance fees are based on the master license fee.

8. Software Development Corp

Software Development Corp, a 5 year old firm, is a subsidiary of Marshall & Isley, a $6 billion bank holding company. In addition to the strength of its parent company, the flexibility and comprehensiveness of their TotaLoan product is cited as their major competitive advantage. In addition to the three basic mortgage banking functions, the system also contains a construction loan module, allowing a user to have one single package for a wide variety of housing-related lending activities.

SDC positions itself as providing a high end, premium product at low cost. It sees its competitors as other firms offering high end products. In the mainframe arena, SDC identified Lomas, CPI, Fannie Mae and DataLink as major competitors; in the PC area, SLIMS, Mortgage Flex, Contour and FICS were cited as competitors. Despite the large extent of its perceived competition, none of the other firms interviewed cited SDC as a competitive force.

SDC targets a full range of small to medium sized mortgage generating firms for its client base. Many of these firms are currently using service bureaus to process their transactions are are just at the volume levels that make it more economical to move their processing in house.

The TotaLoan applications are written in COBOL and run on both IBM mainframes and PCs. SDC serves as a VAR for IBM equipment, but does not provide hardware or systems software support for its users. It does provide one major new release of its application each year, and also provides the normal mix of implementation and operational support services. SDC pricing is fully unbundled and modular, with separate fees for mainframe and PC software.

9. SSI

SSI is a 17 year old firm which specializes in financial applications software for IBM mainframe computers. In adddition to its OMNI product, it offers a wide variety of other products in areas such as securities processing, EFT, leasing, check processing, and data center operations. Although its mortgage banking application is relatively new, it has over 1400 customers for its other products, and numbers 82 out of the top 100 banks as clients.

Flexibility and maintainability of its system, efficiency of operation and economical pricing are the major competitive advantages indicated for the OMNI product, while the maturity and financial stability of the company and its reputation for service are touted as reasons for chosing SSI as a vendor.

OMNI's functions are restricted to origination and secondary marketing, and SSI's target market is restricted to top tier firms. Lomas and Saddlebrook were cited as SSI's chief competitors, with its length of time in the business being cited as Saddlebrook's primary strength. SSI dismissed many other PC-oriented software products vendors as not being competitive in its target market, suggesting the they don't typically work well with larger companies.

SSI emphasizes trade show exhibitions as its primary promotional activity, apparently presuming that the top tier firms always send several representatives to each major show. In addition, it mentioned its use of industry and association directories to determine what kinds of systems and hardware are used by top tier firms, and restricts its targeting to those with large IBM mainframe installations.

SSI's pricing is completely unbundled, and it charges a fee for some of its pre-sale services such as requirements studies and training. However, since it offers only a mainframe-based package, it has a single flat charge for the system license, unrelated to the client's business volume or system configuration.

VI OBSERVATIONS, CONCLUSIONS and RECOMMENDATIONS

This chapter integrates the observations of the User and Vendor Analysis with the Mortgage Industry Background to derive conclusions regarding the direction of the market for mortgage banking systems. Based on these conclusions, and INPUT's observations regarding Saddlebrook's product line, a number of recommendations are made regarding marketing strategies for System M, including issues of:

- Product
- Service/Support
- Positioning
- Pricing
- Promotion
- Target Markets

A
General Observations and Conclusions

1. Mortgage Industry Outlook

The mortgage industry outlook is not strong. Demographic and financial trends which produced a large number of new home purchases and refinancings over the last 6 years are changing in ways that will reduce the demand for mortgages by 25% to 40% in the next few years. In addition, the industry is already suffering from overcapacity, as firms which geared up for the volumes of the early to mid 80s face the consequences of the thrift industry excesses and the aftermath of the 1987 market crash.

2. Competition

Competition will increase in both the mortgage industry and among the industry's system and service providers, due to a combination of

- consolidations of banks and thrifts, and the demise of bankrupt firms
- cost pressures on the surviving firms
- price pressures on system vendors

There will be fewer firms to target for systems and services, and both entrenched vendors and new firms have adopted a strategy of price competition to retain or gain market share.

3. Industry Product Mix

Mortgage products will continue to increase in

- number
- variety
- complexity
- rate of change

This will make the task of the financial institutions more difficult and put a premium on systems and services that provide the flexibility to cope with this situation.

4. Workstation Technology

Intelligent workstations based on the IBM PC technology are rapidly becoming the standard of the financial industry, replacing terminals and distributing processing away from mainframes and minicomputers. The cost/performance of intelligent workstations is rapidly improving, and DEC does not currently have a competitive product in the workstation area.

5. User Concerns

Lack of adequate system flexibility and poor user support are the major concerns of mortgage system users. In addition, as their processing requirements become more complex and their business more dependent on automation, users are increasingly concerned with the experience, maturity and stability of their systems vendors. Few firms are willing to pioneer a new system, and even fewer are willing to rely on a vendor that lacks demonstrated staying power and commitment to the industry.

B
Recommendations

The disappointing recent sales of System M are attributable to several factors:

- a decline in the underlying mortgage market
- increased competition in the market for mortgage-related systems and services
- specific characteristics of the System M product offering

Nothing can be done about either the decline of the market or the increased competition. Therefore, Saddlebrook should focus on redefining its target market and changing the characteristics of its System M offering.

Non-IBM-compatible solutions in the mortgage banking systems market will become increasingly difficult to sell, especially among the larger firms with IBM mainframe installations. In addition, the large firm market appears to be over-targeted, with only 2 of the 9 vendors interviewed saying that this was not a part of their focus. Therefore, the two principal recommendations are to improve the level of IBM-compatibility, and shift market emphasis to mid sized and smaller firms.

It is important to remember that this is a "zero-based analysis." The objective was to assess the marketplace and recommend the best way to compete, without reference to Saddlebrook's current marketing approach or system development plans. Data about Saddlebrook was consciously limited to a System M product demonstration, review of the System M Overview manual, and the comments of users and vendors. To the extent that these recommendations cover plans or activities already underway at Saddlebrook, they serve to validate the importance of those efforts.

The recommendations outlined below are grouped into the following categories:

- Product
- Service/Support
- Positioning
- Pricing
- Promotion
- Target Markets

Product changes clearly require a good deal of planning and take a long time to implement. However, the other marketing recommendations can be implemented quite quickly, and it is suggested that these be given immediate priority while plans for product changes are being developed.

There are two separate reasons for implementing these recommendations:

- Some recommendations are based strictly on matching the competition. Other vendors have established positions, or offer services, that define a minimum standard of performance. Meeting these standards will not provide any competitive advantage, but failing to meet them will prove to be a negative factor in any competitive evaluation.

- Other recommendations are intended to provide a clearly differentiated product and service offering. These suggestions are intended to provide a competitive advantage for Saddlebrook.

Both categories of recommendations should be given serious consideration, and neither should be emphasized at the expense of the other.

Also, it should again be recognized that Saddlebrook may already be implementing some of these recommendations. However, the purpose of this list is to provide a "zero-based" set of issues to be addressed, based on the characteristics of the mortgage banking software/services industry. The important thing is to use these recommendations as the baseline for evaluating Saddlebrook's current and future plans for System M.

1. **Product**

a. Consider rewriting System M for a PC/LAN configuration, or other IBM-compatible, distributed processing system
- Intelligent workstations (I/W) are the trend
- IBM-compatible PCs are the standard
- I/W provides significantly improved response times, an area in which System M is weak
- I/W allows the user modular growth at reasonable cost, while providing the capability for central storage/control of data in a file server (which could reside on a mainframe)

b. Base any upgrades/rewrites on a standard 4GL/database system, where possible
- Facilitates flexibility/modularity of design
- Provides ease of development/implementation
- Provides ease of modification (basic changes to core system)
- Provides ease of customization (user-specific changes)
- Provides ease of user ad hoc query and MIS reporting
- Minimizes training/support burden on Saddlebrook, as other sources of training are available (e.g., the 4GL vendor) and the user may already be using 4GL query languages for other applications
- Provides Saddlebrook with another line of business if it choses to expand training/support services for other user applications of the 4GL

c. Carefully examine the application and minimize custom system code
- Saddlebrook is an applications house, not a systems house
- A focus on developing custom system capabilities often brings only minor improvement in applications performance, but at a high development cost
- Brute force hardware capabilities are constantly getting cheaper
- The PC does not have the same limitations as the PDP-11 on which System M was originally based

d. Consider adopting a Pick- or Unix-based approach
- Both provide good development environments
- Pick provides good 4GL/database tools
- Both provide multi-platform implementations which would allow porting the system to non-IBM environments where necessary

e. Rewrite data entry using full-screen, table-oriented approach
- Current System M looks old by comparison with other vendors
- Provides faster, easier, more accurate and user friendly input
- Easy to do with 4GL tools

f. Provide a laser forms generation capability
- Required to maintain competitive position
- Provides specific advantages to users

2. Service/Support

a. Establish 24 hour hotline coverage
- Very important (psychologically) to users to know it is available
- Will probably not get heavily used, so might be staffed on rotating, standby basis

b. Commit maximum response times to specific categories of problems
- Consistent with 24 hour hotline coverage
- Allows customer to plan how to cope with emergencies/problems
- Provides customer with assurance that all types of problems will be addressed in a timely manner (Note: this is an area where Saddlebrook has been criticized)

c. Assign Customer Account Reps to each client
- Provides single point of contact for client
- Provides Saddlebrook with better visibility of client, improving service and marketing potential

d. Ensure the quality and knowledge of support staff
- This is a major general complaint of users (though not specifically directed at Saddlebrook)

e. Develop a structured, modular package of pre-sale and implementation support services to be provided on a (billable) consulting basis
- Not all users need the same level and mix of services
- Users are nearly unanimous in wanting unbundled support pricing

f. Develop comprehensive, modular installation manuals, training materials, etc. to provide users with more low cost, do-it-yourself options
- Makes system more affordable for users
- Makes more efficient use of purchased Saddlebrook consulting time
- Little training/installation support needed by users with small, simple configurations
- Gives user more flexibility in planning/scheduling demos, training, installation, etc.
- Self-demo training programs could also serve as basis for promotional demos at trade shows and prospect sites

g. Provide system tuning tools/procedures and periodic system performance review as part of maintenance service
   - Activities/capabilities would include:
     - unfragmenting data files
     - rebalancing workload across drives, controllers, terminals, etc.
     - recommending hardware upgrades, as necessary
   - Continued contact via account rep and system personnel helps cement relationships and prevent defections

h. Develop hardware upgrade program which makes it as cheap as possible for user to increase capacity/performance
   - Prolongs life of existing user systems
   - Helps cement relationships and prevent defections
   - Can be done at no incremental cost to Saddlebrook, while making it inexpensive for user:
     - pass full OEM discount on to user
     - buy back old hardware from user (could be resold or used at another user site)

i. Consider developing a cadre of freelance associates that know the system and could be contracted to do custom work for users
   - Provides Saddlebrook with assured capability to respond quickly to varying user request workloads
   - Does not add to Saddlebrook permanent staff/cost base

3. Positioning Emphasis

a. Industry experience and track record of firm
- Very important (psychologically) to users to deal with large, mature organization
- Make separate points of:
  - size of staff
  - industry experience of staff
  - technical experience of staff
  - length of time firm has been in existence
  - length of time firm has been in mortgage business
  - size and financial stability of firm

b. Premium product
- Many other firms boast of a premium product, so it is necessary to echo this positioning
- Make separate points of the system:
  - comprehensiveness (all possible functions/features)
  - modularity (ability to implement any combination of features)
  - flexibility (emphasize both operational and MIS)
- Define premium product for users:
  - product with all these features
  - implemented in a high quality, reliable manner
  - operating at a reasonable level of efficiency
  - priced in a manner which gives full value for user's expenditure

4. Pricing

a. Establish at Mid+ Level
- Premium price not sustainable in current market, due to:
  - declining mortgage market --> declining demand for systems
  - increasing price competition at high end of market
  - increasing number of low price entrants
  - ease of entry into market
  - commitment by major players to cut prices if necessary to build or retain market share
- Some sales lost due to high price of System M

b. Unbundle Services (training, implementation, customization, etc.)
- Publish fee schedule with prices fixed for 1-2 years
- Most other vendors unbundle many or all services
- Most users want to pick and chose what they will buy
- Users do not want a "take or pay" situation attached to their license

c. Modularize Pricing by Installed Functional Capability
- Same capabilities not needed by all users
- Most other vendors do it
- Most users want it

d. Freeze License Fees Based on Business Profile at Time of Sale
- Users want predictable and fixed costs after implementation
  - User costs should not vary if business mix/volume changes
  - User costs should not vary if hardware configuration changes

e. Base Initial License Fees Partially on Business Profile
- Flexible formula allows sales to low volume users, without leaving "money on the table" from sales at fixed prices to large users
- Unbundled services pricing means that it is not unprofitable to provide necessary support to small users
- High volume users may grumble, but will not refuse if pricing is reasonable and competitive
- High volume users are more concerned about fixed long term pricing than high initial pricing

f. Emphasize "Good Value for Your Money"
- Unbundled, modular pricing means no unnecessary purchases
- Premium product positioning is partially a function of pricing ("you can get anything you want at Saddlebrook's restaurant...")

5. Promotion

a. Continue Current Advertisements in Trade Press
- Necessary to maintain company name awareness (everyone else does it)
- Many vendors report getting valuable leads from their ads

b. Continue and Upgrade Demos at Trade Shows
- Same reasons as with advertisements
- Use local processor (e.g., Vaxstation) for demos
  - dialup access to a remote processor gives poor response
  - other vendor demos use fast, local processor (even if only a PC)
- Develop standalone self-demo program
  - illustrates basic capabilities
  - could be developed as part of training materials package, giving added cachet to its use in demo
  - may provoke good leading questions from viewers
  - does not require staff in attendance
- Upgrade knowledge of staff in booth (industry and System M)
  - greater variety of people to talk to than in customer demo
  - lack of control over who will ask what of whom
  - lots of uncontrolled/unidentified eavesdroppers

c. Encourage and Aggressively Pursue Customer Referrals
- Many vendors report this is an important source of leads
- Best reference is a satisfied customer

d. Consider Building a Promotion Package Around a System M Evaluation Based on the MBA Manual, *"Chosing a Loan Production System"*
- Provides authoritative, standard reference to "the right questions"
- Demonstrates Saddlebrook commitment to objective evaluation
- Demonstrates Saddlebrook involvement with/knowledge of industry
- Provides a good tool to market to small users
  - their knowledge is more limited than larger users'
  - answers their questions with minimum marketing cost
  - adds cachet to Saddlebrook pitch
- Allows Saddlebrook to anticipate/defuse areas where comparative evaluation would not favor System M
- Could build secondary marketing addons to expand scope of manual
  - demonstrates commitment to help user
  - further demonstrates involvement with/knowledge of industry

6. Target Markets

a. Reduce Focus on Top Tier
- Too many firms chasing this market
- Market tends to be dominated by large IBM shops
  - many are "true Blue" and Saddlebrook won't have a real chance
  - may have monolithic systems that are hard to interface with
  - cost of multi-vendor solutions are often considered too high
- Firms which handle servicing may prefer a single, "integrated" package from one vendor to a multi-vendor, multi-platform solution

b. Increase Focus on Middle and Lower Tier
- Revised pricing opens broader base of profitable markets
  - smaller firms can afford system due to lower basic license fee
  - firms can purchase what they need of system modules and services
- These firms may be more cost/benefit conscious than top tier firms
  - under more long term performance pressures
  - have less overhead in their budgets and operations
- Mid and small size firms tend to require less marketing cost
  - fewer people to sell
  - faster decisions
- Marketing cost decreased by using new promotional material

c. Emphasize S&L/Thrifts, Mortgage Banks, and Credit Unions; Decrease Focus on Commercial Banks
- Commercial banks have many more lines of business
  - reduced emphasis on problems of mortgage banking
  - greater problems of integrating new systems
- High quality firms in S&L, etc. group will remain in business
  - problem S&Ls/Thrifts will be taken over in part by good S&Ls
  - banks more likely to acquire other good banks than S&L/Thrifts
  - thrift industry will continue to survive for some time due to strong political forces

C
Rationale and Summary

1. Characteristics of System M Product/Service Offering

The reasons for the recommended changes to the System M product and service offering are straightforward and have been outlined above. In summary,

- *Product* changes are required to make the system appear modern and up to date as compared with the competition. In addition, the IBM compatibility issue needs to be addressed as more users, both large and small, come to have PCs in place and cannot afford to install additional non-compatible hardware.

- *Service and support* are among the most important issues with users. Although Saddlebrook already has a good reputation in this area, changing the approach as suggested will further enhance the quality of service and support and improve Saddlebrook's competitive edge with its current market. In addition, packaging the installation support in more of a do-it-yourself manner will enable System M to be sold to a broader, low end market which cannot afford and does not need extensive front end support.

  Another key aspect of the support recommendations is enhancing the life of current customers' existing PDP-11 installations through better system management tools and passthroughs of OEM discounts on hardware upgrades. It is better to keep a current customer by lowering the profit on servicing him than to lose him altogether due to the high cost of upgrading to a VAX-based system.

- System M already has effective *positioning*. The key is to capitalize on this situation by careful publicity and communication, making sure users are aware of Saddlebrook's position and why that position is important to them.

- The basic thrusts of the *pricing* recommendations are to:
  - respond to the demands of users and the approaches of other vendors
  - increase the number of firms which can afford System M
  - capture the maximum amount of revenue from sales at each tier of the market

- As with position, System M *promotion* appears to be effective as it is now, and the recommendations are oriented towards strengthing an already solid approach.

2. Target Markets

The recommendation to shift target markets away from top-tier firms and toward the smaller end of the market is based on two key factors:

- the small number of target firms in the top tier
- the large number of vendors chasing these same targets

In addition, larger firms are likely to have IBM mainframe shops, central control of systems procurement/development, and little tolerance for non-IBM systems. Mid-sized and smaller companies often are more open to other vendors, and often give end user departments more control over the systems investment decision.

The recommendation to shift target markets away from commercial banks and toward S&L/Thrifts and Mortgage Banks is also based on two key factors:

- Commercial banks have a harder time evaluating and purchasing packages than institutions such as S&Ls. With a wider variety of applications to run, the average commercial bank has more IS staff and does more custom work than the average S&L of comparable size.

- The average mid-sized S&L originates nearly 4 times the dollar volume of mortgage loans as the mid-sized commercial bank, and has approximately 40% more branches.

According to the statistics presented in Chapter III, Section I, there are approximately 3 times as many mid-sized commercial banks as there are S&Ls. However, the combination of mid-sized S&Ls and mortgage banks provides a large enough target market to keep Saddlebrook busy. In addition, the user needs (in terms of loan volume) are greater and the ease of penetration is higher in the S&L arena.

3. Expected Sales Rates

According to the statistics presented in Chapter V, Section B (Questions 14/15), most of the vendors surveyed expected to increase their installed base by 10-15% in 1988. The firms which focussed heavily on the top-tier were generally on the low side of this growth rate.

All vendors suffered from the decline in the mortgage market, and will continue to do so in the future. Saddlebrook has a mixed position in the market vs. its competition, and the disadvantages may have outwighed the advantages in 1988:

Advantages

- position/reputation of firm
- service/support reputation

Neutral factors

- promotion

Disadvantages

- pricing
- product

Pricing changes, coupled with changes in service/support offerings, can be made immediately and should have a positive impact on sales to the middle and lower tiers. In addition, a shift in target market focus should provide a higher success rate than at present.

Product changes will clearly take some time to implement, and System M will continue to feel the impacts of non IBM-compatibility and an "old looking" system until these situations are remedied.

Assuming all the other changes are implemented in the near future, System M should conservatively be able to achieve sales in 1989 at the high end of the average reported by other vendors (15% increase in installed base).

Even with all the recommended changes, however, it seems unlikely that System M sales could exceed 20-25% of the installed base.

Given the above assumptions, a 20% annual growth rate is recommended as the "stretch target" for System M sales.